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ABSTRACT

Results of a survey of college-school activities related to student preparation for college are discussed, based on responses of more than 300 two-year and four-year institutions. General trends are reported, and brief descriptions of college programs are provided. Most of the programs are for talented students. Programs that are less common aim at students who are underprepared or not highly motivated to attend college. These programs are usually intended to help minority students. Requirements that public colleges report students' performance to high schools from which they graduated exist in some states, and some colleges send such information to schools on a regular basis. Other programs that are designed to increase student preparation and motivation for college focus on: career counseling and orientation to college life, and college-school programs both within and outside of schools. Programs for gifted and talented students include early admission, joint enrollment, summer enrollment, Saturday programs, summer camps, competitions, and research and internship positions. College-school action aimed at curriculum and teaching are often individual faculty efforts, rather than institutional initiatives. (SW)

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Improving Student Preparation: Higher Education and the Schools Working Together

Lynn M. Cornett

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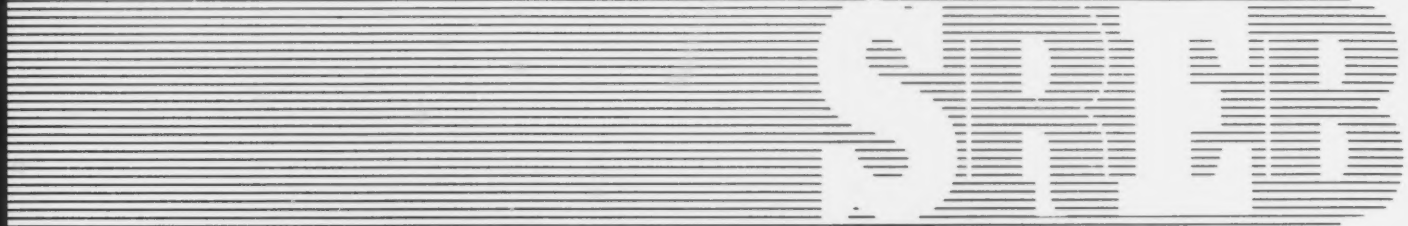

Staff assistance provided by Stephanie A. Korcheck

Foreword

Colleges and universities cannot operate very well without students who are adequately prepared. For this single reason, higher education must play a strong and active role in efforts to prepare high school students for college. That role becomes more urgent as states and institutions raise standards for entrance into college.

To that end, many higher education institutions in the SREB states are working effectively with schools. Information about such efforts can be helpful elsewhere, which is the purpose of this publication. It has been prepared in the hope that tangible, meaningful partnerships for the benefit of students will become standard practice and that college and school leaders make them a priority.

SREB appreciates the work of the 300 colleges and universities who responded to requests for information about college-school programs to prepare students for college study.

Winfred L. Godwin
President

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Higher education should initiate close working relationships with the public schools to enrich the preparation of students before they leave high school.

Access to Quality Undergraduate Education, SREB, 1985

If colleges and universities are to increase the quality of undergraduate education and reduce remedial education, they must get involved in the preparation of high school students. By working closely with schools to better prepare and provide motivation and enrichment for students before the freshman year, colleges can increase the quality of their undergraduate education.

Most of the higher education-school cooperative programs in the SREB states now are in the following areas:

1. Feedback of information about college expectations and student performance to schools
2. Motivation, career counseling, and programs for better student preparation
3. Talented student programs
4. Curriculum and teaching

State efforts and national college/school models are also found across the region.

More than 300 four-year and two-year public and private institutions responded to an SREB survey of college-school activities related to student preparation for college. A majority of the programs are for talented students. Programs aimed at students who are not highly motivated to attend college or who need to be better prepared are not as common. The programs of this kind are usually intended to help minority students. The following are general trends and examples of programs based on descriptions reported by the institutions.

Reporting Student Performance to High Schools

Four SREB states require that their public colleges report students' performance to the high schools from which they graduated. Georgia's and South Carolina's colleges have been required to report the information for several years; the requirements in Florida and Louisiana are more recent. South Carolina's four-year and two-year colleges report courses taken as well as the grade-point-average (GPA) of their graduates to high schools. The Georgia Board of Regents provides information (on a district and high school aggregate basis) that includes Scholastic Aptitude Test (SAT) scores, credit hours taken, grade-point-average, and the number of developmental courses taken for each freshman student. In Florida the universities and community colleges are to report performance of graduates to districts. The reports must include the number of students referred to remedial programs. The Board of Regents has a computer network that allows districts to get information on courses and grades. The 1985 Louisiana law calls for state colleges to report to public and private schools on performance of their graduates and the number of students who require remedial training in each subject area. The information is to be reported from colleges for students graduating the preceding four years from each high school in each district and entering a state college or university.

Maryland, North Carolina, and Tennessee are also taking important actions. The Maryland State Universities and Colleges System sends a record of hours attempted, hours passed, G.P.A.s, and SAT scores for each high school graduating class to every school superintendent. Information on race and sex of each student (without identification of individual students) is also provided. The University of Maryland has just instituted a

feedback program to provide high schools with freshman performance information. It will be patterned after an existing system for community college transfers. The University of North Carolina is developing a system-wide reporting plan; two institutions (the University of North Carolina at Wilmington and the University of North Carolina at Charlotte) are already providing information to area schools on a regular basis. The Tennessee State University and Community College System is developing a data base to be used for reporting performance information. Information from the Academic Assessment and Placement Program, which measures readiness for college-level courses for students who score below 15 on the ACT, will be provided. The assessment covers skills in reading, logical relationships, and mathematics. Information will be provided to high schools on how graduates of a particular high school compare with all state students who took the exam. Feedback will be subject-specific, for example, "operations with decimal and percent." East Tennessee State University and Middle Tennesse State University and almost all of the community colleges already report information to schools on a regular basis.

Generally, unless a state or system-wide program exists, neither public nor private colleges and universities send information about student performance to schools. Many public and private institutions provide information on request, although several cited the federal government's Buckley Amendment (privacy of information act) as a reason for not doing so. The Buckley Amendment is not a problem for the state plans reporting on students because they use aggregate data or remove student names from the reports. Several community colleges, including Houston Community College (Texas), indicated that since the average age of their students is 28, the information would not be indicative of current high school programs.

There are, however, exceptions, and some colleges do send information to schools on a regular basis. Prince George's County Community College (Maryland) provides each county high school with summary information on placement testing results. The University of

Texas at Austin sends performance information, including averages for comparison, to any high school sending at least five students to the campus; Louisiana State University at Baton Rouge does the same for schools sending 20 students. The Fort Worth schools receive information about freshman performance from Texas Christian University, Texas Tech University, and the University of Texas at Arlington. Several two-year colleges in Texas (Alvin Community College, Amarillo College, and Tarrance County Junior College) regularly send data. The University of Louisville (Kentucky) is developing a student reporting system to be implemented.

Several institutions, including the University of Southwestern Louisiana, Miami-Dade Community College (Florida), and the University of Texas at El Paso report the information at joint meetings of school and college administrators to promote discussion on this topic as well as other college-school issues. The University of Maryland at Baltimore County brings together arts and sciences faculty and high school department heads to discuss results and their meaning for schools and colleges. Professional staff from the admissions office at the University of North Carolina at Charlotte deliver the information to high school counselors so they can discuss the performance of graduates and answer questions.

Although most of the student reporting focuses on courses, G.P.A.s, and number of students in remedial courses, three institutions (Jackson State University in Mississippi, Mount St. Mary's College in Maryland, and the University of Tennessee at Martin) provide high schools with lists of freshman honor roll students.

It is not clear, however, how extensively the information from student performance reporting programs is used to bring about change in the high schools. Colleges and universities provide the information, but it is up to the high schools to examine results and make changes. To date, colleges and universities have not been involved to any degree after they report to the high schools.

Joint meetings of college and high school faculty and administrators are certainly a step toward closer cooperation. Reporting the student performance data is often the initial reason for these joint meetings.

Although not the norm, several institutions detailed efforts in this area. Central Florida Community College reports that in addition to providing the information to the schools, staff are in close touch with high school curriculum coordinators in an effort to keep everyone informed. Staff report that because of the activities there has been a definite influence on the programs and courses in the schools and in the college. Three West Virginia colleges (Wheeling, Bethany, and West Liberty) have provided diagnostic testing (placement exams) in foreign languages to Wheeling Park High School students. On the basis of the information, the high school has worked with faculty to improve existing foreign language courses in the high school.

Increasing Student Preparation and Motivation for College

Most colleges and universities have developmental or remedial programs for entering students who are not ready for college work. Relatively few are involved in efforts aimed at improving skills and motivation of students before they enter college. In fact, several institutions responded that higher education should not be involved with preparing students before they enter college. In eight SREB states at least half of the responding institutions reported activities for high school students to improve academic skills or motivation. Most programs are at 4-year public institutions; nearly two-thirds reported some kind of activity. The efforts ranged from one-day career days for high school students to specific programs with high schools to diagnose and remediate skills of their students. Providing information about college programs was the aim of most activities.

Almost 20 percent of the colleges and universities reported federally funded programs for disadvantaged students, such as Upward Bound. Upward Bound is usually a full-time summer program on the college campus, followed by a year-long follow-up on Saturdays. For instance, at North Texas State University (NTSU), the program is aimed at students from small, isolated rural districts in north Texas who are economically disadvantaged but who have potential to do college work. Academic courses, formal counseling sessions, and individual tutoring are all part of the program. Although the program is federally funded, the university assumes responsibility by providing personnel and other support for the program. The mean grade- point-average for former NTSU Upward Bound students is above the average for all NTSU freshmen.

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Special state policies in several SREB states are intended to aid students who are not academically ready to enter college.

In 1983, Florida appropriated funds for college "reach-out" programs. Higher education was called on to help strengthen preparation and educational motivation of low income or educationally disadvantaged students through programs that include teaching and advising during the school year or summer.

In Louisiana, 1985 legislation called on the State Board of Education and the Board of Regents to provide remedial summer school programs through public high schools. Students who plan to enter college but who have low American College Testing (ACT) scores must attend. By 1987 each local school board is to establish a program with local higher education institutions. Funding is to be through self-generated dollars or through local funding; estimates are that $1.7 million in local funds will be necessary statewide.

The Tennessee State University and Community College System and Board of Education are working to reduce the number of college freshmen who need remedial work. Most of the institutions in the system have some kind of program, such as Upward Bound or testing and diagnosis of student academic weaknesses, already in place.

South Carolina committed over $5 million in 1984 to implement throughout the state computer-assisted instruction for high school students who score low on reading and mathematics tests. The Governor's Remediation Program, centered at Winthrop College, receives technical assistance from several of the state's higher education institutions. A computer network links all schools to Winthrop College and allows teachers to get immediate responses from the college as well as to communicate with each other. Developing software, changing curricula, and teacher training are also part of the project.

Initiatives taken by individual institutions to improve skills of students who may not be ready for college courses or bolster their motivation to prepare for college include: career counseling; college/school programs within schools; and college/school programs outside of school.

Career Counseling and Orientation to College Life

Information about offerings and the opportunity to experience college life are the focus for many college-school activities. Programs to acquaint students with a particular campus and motivate them to attend that college are also used for recruiting by individual institutions. High school counselors are often included to provide information about college requirements.

Brevard Community College (Florida) has developed a detailed counseling manual to help teachers, parents, and students understand the programs at the college and help make the transition from high school to college. This was a project of an academic committee established by the president of the college and the local school superintendent.

Broward Community College (Florida) programs include a high school day in which seniors tour each campus in individually guided tours for students interested in veterinary medicine, technology, and music. University of Maryland-Eastern Shore, Lee College (Tennessee), and Georgetown College (Kentucky) allow students to visit college classes between their junior and senior years to gain an understanding of college expectations. Mitchell Community College (North Carolina) opens its career center to high school students.

Santa Fe Community College (Florida) offers a one-week workshop for counselors from all the schools in the neighboring districts to acquaint them with the programs at the college. A stipend is paid for attendance.

University of West Florida supports a mobile science van which travels to three surrounding counties to supplement resources in high schools by offering hands-on expericence for students. The program focuses on improving students' interest in science. The faculty also lend their expertise in career planning for high school students.

Clayton Junior College (Georgia) sponsors a Social Science Symposium and a Creative Arts Festival to bring high school students to the campus. The students are given the opportunity to spend a day or an evening at the college; they can also meet individually with faculty members.

Southern Technical Institute (Georgia) invites middle school students and counselors to the campus every summer to acquaint them with programs and academic requirements. Middle school students are targeted so that time will be available to complete the necessary requirements for entrance.

Salem College (North Carolina) sponsors the Women in Science program in which high school students come to the campus to work with faculty members for one day. The college also has an on-campus visitation program for high school students.

University of North Carolina at Charlotte, Texas Christian University, and Hall Junior College (Texas) admissions staff conduct programs in area schools to inform students of the proper sequence of courses needed for college preparation.

University of Texas at Austin invites districts with a high density population of minorities to nominate seniors to visit the campus. Students are brought to the campus by bus to attend sessions on academic opportunities, survival skills, financial aid, and high school curriculum requirements. The university sends a "math alert" letter to those students who have expressed an interest in business, engineering, and science, and who have low math scores on the SAT. Students are given information on how to improve skills.

Blue Ridge Community College (Virginia) has a program in which 9th, 10th, and 11th graders are bused to the campus from surrounding communities to talk with college students and faculty about the importance of completing certain high school courses to be eligible for college programs. Workshops are sponsored for high school students on study skills and test-taking.

University of Virginia admissions office coordinates a local program in which black high school students who have the potential for success are offered career exploration activities, tutoring, and orientation to college life.

Concord College (West Virginia) initiated a program with the West Virgina Department of Education and the Board of Regents called "Making High School Count" which assists middle or junior high school students in planning a pre-college high school program.

College-School Programs Within the Schools to Improve Student Preparation and Interest

Few colleges work with schools to assess student preparation for college and provide help. Less than 10 percent of the colleges responding to the SREB survey had this kind of program; several are summarized here.

Georgia State University has developed a "Senior Selects" program with a local Atlanta high school and the College Board. The purpose is to identify students who do not intend to go to college and provide motivation and preparation to encourage students to attend. All students are enrolled in common courses in the high school. Developmental materials and methods have been jointly developed by teachers and faculty from the developmental studies program at the university. Out of 41 students in the program in 1985, 35 enrolled in college. Discussions are underway to expand the program to additional high schools.

Louisiana State University is working with area schools in a program called TOP. Developed after the Ohio State model (placement testing in mathematics is provided for high school juniors, with information on results and required college courses furnished to students), high school juniors are given a mathematics placement examination. Information on readiness to enter college mathematics courses is provided to each student. University of Tennessee at Chattanooga also is developing a program based on the Ohio State model.

Northeast Mississippi Junior College administers a talent assessment program in local high schools. Profiles of students are sent to counselors, and college counselors work with high schools in interpreting the results.

Mayland Technical College (North Carolina) has been working with three area high schools for the past four years to improve educational planning. Academic placement tests are administered at the beginning of the senior year. Counseling is provided for students based on the results of the tests and students begin remedial study, if necessary.

University of North Carolina at Wilmington is the site for a pilot program to increase numbers of women and minorities in science. The North Carolina Intervention Program for Women and Minorities in Mathematics and Science will provide opportunities in math and science in junior and senior high schools.

Oklahoma State University sponsors a Minority Proficiency Program with several high schools that have large minority populations. Students are assessed in the sophomore and junior years in mathematics and writing. Information is prepared for students on readiness for college work. Faculty have worked with teachers to develop methods for remediating deficiencies. A follow-up program, which includes post-testing, encourages students to continue taking English and math courses in high school.

Sumter, Piedmont, and York Technical Colleges (South Carolina) have worked with the governor's remediation project for schools. The faculty have provided technical expertise to high school personnel on the use of computers in individual remediation of students in reading and mathematics (similar to college remediation programs).

San Jacinto State College (Texas) provided English and mathematics placement testing for high school seniors in the spring that included a sample writing test. It was concluded that the test needed to be given earlier so that more time was available to remediate problems.

Virginia Polytechnic Institute and State University has a program with area schools to diagnose the reading ability of high school students, and through graduate students working in the schools, provide remediation.

College-School Programs Outside of School to Improve Student Preparation and Interest

The overwhelming majority of programs outside of school in the SREB states are to increase minority students' preparation for college. A large number are related to specific careers, such as those for prospective engineering or health science students. Many of the programs are for students who clearly have the potential for college but who need additional skills and motivation to attend college. These efforts usually supplement high school programs.

University of South Alabama administers a summer college pre-engineering program for 60 minority students, at no charge. Students attend classes to upgrade skills, experience campus life, and explore career opportunities in engineering. Engineers from local industry work with the students.

University of Arkansas, Fayetteville offers the Minority Introduction to Engineering (MITE) program, which is held on the campus for minority students between the junior and senior years. Sixteen students with an interest and aptitude for engineering and a 3.0 G.P.A. participate in the two-week residential summer program, which includes trips to local employers and opportunities to visit engineering faculty. The Department of Chemistry, under joint sponsorship with the National Institute of Health, conducts the Research Apprentice Program. Faculty in health-related research work with eight students to broaden their interest in science.

Several junior/community colleges and senior institutions in Florida, prompted by 1983 state policy actions, have programs to recruit and work with minority students.

Florida Atlantic University promotes postsecondary education among minority students through several programs. One program, Saturday Scholars, brings 10th and 11th grade students to campus to study creative writing, speaking, and mathematics. Transportation is provided and participants are paid $5 per session. Peer recruiters are also paid for getting others interested in the program.

Indian River Community College, through its minority recruitment office, contacts families of junior high school students to discuss college. The program seeks to intervene at an early stage to provide information and increase motivation for potential students.

Santa Fe Community College has designed the College Achievement Program to increase the success of minority students with good academic records but poor test scores. In the seven-week summer program students study English and mathematics and are employed at the college on a half-time basis.

Macon Junior College (Georgia) brings 50 minority high school graduates to its campus in the summer in an attempt to attract and retain minority students. The programs are directed to increasing the academic skills of students and developing their motivation to attend college.

Morris Brown College (Georgia) has an eight-week summer program designed for minority students in the 8th and 9th grades who are interested in engineering. Included are courses to improve critical thinking, computer programming, and mathematics skills. Students must have a "B" average. In the Health Career Opportunity Summer Program, also held on the campus, students study sciences and mathematics to broaden and increase academic ability to study health sciences in college.

West Georgia College's Minority Enrichment Program is held one week in the summer for 25 high school juniors. It focuses on increasing skills and orientation to campus life.

University of Kentucky, in conjunction with the Economic Development Commission of Louisville, holds a three-week summer program for women and minorities that includes an introduction to accounting, engineering, and architecture.

Johns Hopkins University (Maryland) has developed a program for minority students in conjunction with the Baltimore City Schools. A campus tutorial program, held both in the summer and during the year, brings about 100 students to campus for diagnostic testing and tutoring. Parent interviews and workshops are also included in the program.

University of Western Maryland has a summer program for all students provisionally admitted to the institution for the fall. Students study English, receive tutoring, and learn study skills.

Duke University, University of North Carolina-Charlotte, North Carolina Central University, and area superintendents are working with the College Board on a linkages model called Triangle Bound Table Consortium to increase minority representation in higher education. In one of the projects, called "Critical Choice Points," participating junior high school counselors work with at-risk, yet talented, students and their parents to promote ideas about college choices and opportunities.

University of South Carolina at Columbia conducts two programs for minority students in mathematics skills. Students attend classes in the morning and have campus jobs in the afternoon. Partners for Minorities in Engineering is a program for "rising senior" minority high school students that offers intensive academic work and preparation for the SAT.

University of South Carolina at Spartanburg sponsors math and reading clinics for high school students (and adults). Students may attend sessions on SAT review as well as study skills, speed reading, and pre-algebra courses.

Texas A&I University has a joint program with industry for minority students to develop interest and skills in engineering. Students with potential are identified in junior high school and a liaison faculty member works with the schools and parents of students to develop skills and motivation for college. Also included are summer orientation and planning sessions.

University of Texas at Austin has several subject programs specifically aimed at skill development and motivation to attend college. Both the Division of Biological Science and the School of Architecture hold summer institutes for orienting students to college life. The College of Business Administration and the College of Engineering sponsor summer programs to offer insight and opportunities to minority students.

University of Texas at San Antonio holds a two-month summer Pre-freshman Engineering Program (PREP) for minority and women students in grades 6-10 who have B averages and may eventually pursue engineering studies. Over 1,000 students have attended the sessions during the last six years. A major objective of the program is to strengthen abstract reasoning and problem-solving skills in addition to career opportunities. In 1984, an evaluation of the program showed 89 percent of the students either were in or planned to attend college. The program is funded through grants from area businesses, the university, and federal agencies.

Norfolk State University (Virginia) supports several programs aimed at increasing skills of minority students. One is for students interested in health careers; there is also a pre-college program for students interested in mathematics and science. Programs, which are held on Saturday mornings in conjunction with a summer institute, use retired faculty as tutors for the high school students.

Tidewater Community College (Virginia) has a six-week summer transition program for minority high school graduates who are academically high-risk students. Christopher Newport College has a similar program.

Virginia Polytechnic Institute and State University has two programs for rising high school seniors who are minorities. Minority Introduction to Engineering Program (MITE) is a one- or two-week program to improve study skills and provide knowledge about engineering careers. The university also sponsors a three-week minority engineering program to help students prepare for college.

Providing Programs for Gifted and Talented Students

Early admission, joint enrollment, summer enrollment, and activities, such as Saturday and after-school programs, competitions, summer camps, and research and internship positions, all improve the educational opportunities of talented high school students. Most SREB state colleges and universities have one or more programs for talented high school students. Efforts are more prevalent in public colleges and universities than in private institutions--less than one-tenth of the public colleges reported they had no programs, but almost a quarter of the private institutions had no college/school programs of this type.

Early Admission

Less than 20 percent of public two-year and four-year institutions offer early admission to high school students. Early admission is even less common in private colleges. Students can participate in early admission programs by enrolling for the summer session following the junior year or as a part-time or full-time student during the senior year. Because of the differences in how students participate, the distinction between what is truly early admission and what is joint enrollment (described below) is sometimes lost. The distinction is clear only when students participate on a full-time basis at the college and, in essence, eliminate their senior year of high school study.

Joint Enrollment

Joint enrollment, also referred to as dual or concurrent enrollment, is the most popular type of college-school effort in the SREB states. Programs exist at well over three-fourths of the public two-year and four-year colleges and at more than half of the private institutions.

Complete information on the type of credit awarded in joint enrollment programs is not available. It appears that over half of the institutions award college credit only; approximately one-third grant both high school and college credit; only a few award high school credit only.

Joint enrollment programs vary widely. Aside from the type of credit awarded, programs differ in eligibility requirements, the number of courses and the associated costs, the site of the courses, and who teaches them. Some institutions offer what they call "early admission" when, in fact, these programs are really joint enrollment since students take both high school and college-level courses. This interchanging of terms further confuses any attempt to distinguish between programs called early admission and those referred to as joint enrollment.

Most joint enrollment programs appear to have the following standards: the student must be a senior with at least a score of 1000 on the SAT and a 3.0 grade-point-average. Required scores range from 940 to 1200 on the SAT and 23 to 30 on the ACT, with a 3.0 or 3.5 grade-point-average. Parental permission and a recommendation from a counselor or principal on academic and emotional readiness to undertake college-level work are needed. Most of the institutions apply regular tuition and fees to students participating in joint enrollment programs. All of the institutions stipulate that students may not exceed the normal load when the number of college-level courses and high school courses are combined. A majority of the institutions set a maximum of two college courses per academic semester. Courses at the college level cannot duplicate courses available in the high school and students must have completed the necessary prerequisites.

Many of the SREB states have enacted statutes or policy guidelines authorizing college-school joint enrollment. As a result of 1979 Florida legislation, every community college president is required to submit yearly an agreement with each district school board within the college's district on cooperative joint enrollment programs. The law also provides for reimbursement to the colleges for any instructional materials used by high school students in joint enrollment programs.

For example, the agreement between Edison Community College and the District School Board of Lee County in Florida includes the following:

1. To participate, the student must be a junior or senior, or fit the state designation as "gifted"; must hold a 3.0 grade-point-average or have approval from the principal; and must not have completed sufficient units to qualify for graduation.

2. Deans from Edison Community College and each principal will determine which college-level courses are to be offered in the high school. If fewer than 15 students enroll for a course or if facilities are not available, the course will be scheduled at the college.

3. Courses offered under the agreement will be granted both high school and college credit, upon approval of the principal.

4. High school personnel who wish to teach college-level courses must meet the same requirements as all other Edison faculty, that is, hold a master's degree and have within that degree no less than 18 graduate semester hours of content courses in the area to be taught.

5. No tuition or fees will be charged to the student. Because the student is receiving credit from both the college and the high school, each is permitted to count the student in formulas for funding purposes.

Institutions offering joint enrollment to students prior to the senior year often demand more selective standards. For example, at West Georgia College the requirements for juniors are a 3.5 G.P.A. and combined SAT score of 1100; for seniors, a 3.0 G.P.A. and SAT score of 900.

In most instances, courses offered through joint enrollment programs are held at the college and taught by college faculty. Many institutions, however, attempt to provide local high schools with assistance so that high school staff can teach the courses. Appalachian State University in North Carolina has provided such assistance to five high

schools in its area. College-level courses, for both high school and college credit, are taught at the high school by high school faculty approved by academic departments at Appalachian State. A faculty member works closely with the corresponding high school teacher. Texts, syllabi, and instructional and evaluation techniques are very similar, if not the same, as those used on the Appalachian State campus. Approximately 170 students are in these courses; each takes an average college course load of nine semester hours per term.

One final variation of joint enrollment exists where colleges offer specific college-level courses to high school students. Requirements for participating in these courses are generally the same as those for traditional joint enrollment. Examples of these types of efforts are:

University of Montevello in Alabama, in a program designed to augment the foreign language curriculum in the schools, allows qualified juniors and seniors to enroll, tuition-free and for college credit, in any introductory-level foreign language course.

Hopkinsville Community College (Kentucky) allows selected seniors to enroll, at regular tuition, for six hours of composition, three hours of speech, and three hours of theater arts. Upon successful completion of this sequence, students receive 12 semester hours of college credit and are granted high school credit for their senior year English requirement.

Louisiana State University at Alexandria has developed a program whereby qualified seniors at Louisiana's Peabody Magnet High School may enroll in two English courses and two math courses and earn up to two units of high school credit and up to 19 semester hours of college credit. English composition, English literature, elementary mathematical functions, and analytic geometry and calculus are taught in the high school by college professors provided by LSUA; high school faculty serve as team members. Students are required to pay regular tuition; textbooks, however, are provided by the high school.

Summer Enrollment

In many instances, summer enrollment and joint enrollment programs overlap--if students qualify and participate in one, they may enroll in the other. Requirements for participation in summer enrollment are comparable to those for joint enrollment. Following are examples of three types of summer enrollment programs:

Delta State University (Mississippi) permits students to participate in the rising senior program if they meet the following requirements: 20+ on the ACT, "B" average in high school coursework, and recommendation from their principal. This program allows rising seniors to take one freshman-level course for college credit during a summer term. Students are required to confer with and be approved by the professor whose course they wish to take. Regular tuition costs apply.

Louisiana State University, Baton Rouge offers rising seniors, with a 3.0 grade-point-average, a score of 26 on the ACT or 1160 on the SAT, and a recommendation from their counselor or principal, the opportunity to participate in "Superstart," a six-week summer program for college credit. Two courses, "The 20th Century" and "Introduction to Psychology," have been specially designed for Superstart students and are highly recommended; other courses are available. Regular tuition and room and board costs are required.

Presbyterian College (South Carolina) asks each high school in Georgia and South Carolina to select two men and two women from its junior class for the Junior Fellow Program. These students can then attend one or both summer sessions at Presbyterian College tuition-free, and earn up to 14 semester hours of college credit.

Other Programs

Special activities have been developed and are available in both public and private institutions--Saturday and after-school programs, competitions between high schools and their students, summer camps, and research and internship positions. The examples below illustrate the types of activities.

Saturday and After School Programs

Berea College (Kentucky) offers the Weekend Workshop, which runs over the course of several weekends, and is a cooperative learning experience involving high school students, their teachers, and Berea faculty members. Participants work extensively in a subject of their choice and exchange ideas with colleagues from neighboring schools.

Laredo Junior College's (Texas) departments of chemistry, biology, physics, and mathematics developed special Saturday morning programs that provide 24 hours of instruction for gifted high school students at the request of a local school district.

The University of Tennessee at Chattanooga, with funding from the Hamilton County school system, provides enrichment courses, taught by university faculty, in the natural and physical sciences, computing, Russian, mathematics, and literature.

Competitions

Snead State Junior College (Alabama) hosts the Scholars Bowl, a two-day competition in which teams earn points by being the first to correctly answer toss-up and bonus questions. Sixteen high schools send five students each to compete for trophies and scholarships.

The University of Arkansas at Fayetteville brings together junior and senior high school students from across the state to participate in the Foreign Language Festival, a series of academic competitions and cultural activities.

The University of Texas at Arlington sponsors the Regional History Fair, which determines winners who will advance to state, and possibly national, competition as part of National History Day. Categories of competition include historical papers, dramatizations, and media presentations.

Summer Camps

The University of Maryland at Eastern Shore offers the Summer Humanities Institute, which is a month-long seminar funded by the National Endowment for the Humanities. Thirty-five students participate in college-credit humanities courses taught by leading scholars in literature, art, music, and philosophy.

The University of North Carolina System's "Summer Ventures in Science and Mathematics" is available to 600 rising juniors and seniors at all campuses of the University System. University faculty, selected high school teachers, and guest lecturers teach fundamental concepts of science and math, the application of those concepts, and the consequences of technology in modern society. There is no cost for tuition or room and board.

The University of South Carolina at Aiken's Summer Journey Through Literature, Writing, and Computers focuses on ethical, historical, and philosophical issues that are appropriate to the grade level of the participants. Computers are used to allow students to create projects illustrating the decision-making processes discovered in readings and oral discussions.

Research and Internship Positions

East Carolina University (North Carolina) provides internships at the University's Medical School through the Senior Honors Program in Medical Science. High school seniors spend approximately 10 hours every week during the academic year under the supervision of a Medical School faculty member. During the fall semester, these students and their high school science teachers attend medical science seminars at the Medical School.

The University of Arkansas at Fayetteville sponsors the Beginning Scholars program through the Colleges of Agriculture and Home Economics. Applications are submitted from all over the state and each College selects two students based on ACT scores, grade-point-averages, recommendations, and demonstrated interest in science or social studies. The five-week summer program involves a two-hour college credit course in the morning. Students then work one-on-one with a University faculty member to plan, execute, and present a research project for one hour of college credit. Students are housed with an upperclassman to provide support and assistance.

The University of Louisville (Kentucky) offers a six-week Summer Minority Mentorship Program giving 12 to 15 gifted minority students the opportunity to work one-on-one with an arts and sciences professor on various research projects. The students, all from local high schools, are selected on the basis of strong academic recognition. In addition to assisting with research, participants are tutored in good writing skills by a member of the English composition faculty, and an oral presentation of their work is required. Scholarships are available to forego the economic incentive of a summer job.

Other Special Activities

James Madison University's (Virginia) Stock Market Game, sponsored by the University's Center for Economic Education, teaches economic concepts, financial markets, business organization, and the stock market. Students also develop research and analytical skills as well as math and computer capabilities.

Miami-Dade Community College (Florida) allows students to receive academic instruction at their high schools in the morning. Afternoons, approximately 300 selected students travel to the Performing and Visual Arts Center at Miami-Dade for highly specialized training in art, theatre, dance, and instrumental and vocal music.

The Mississippi University for Women serves as host for the Mississippi Governor's School, a summer residential honors program designed to provide academic, creative, and leadership experiences for a select number of rising juniors and seniors. Students can receive college credit by participating in the Governor's School.

Cooperating on Curriculum and Teaching

Efforts of higher education and the schools that deal with curriculum design and teaching in the schools are found across the region but are, generally, individual efforts by faculty and teachers rather than organized efforts of colleges and schools.

A number of nationally sponsored collaborative projects or models are found in the SREB states. Writing projects, modeled after the Bay Area Writing Project of California (now reaching over 70,000 teachers across the country annually), are one example. The projects link the practice of writing with the teaching of writing in the schools.

Faculty from slightly over 50 higher education institutions in the region (15 are in Georgia, 11 in Mississippi) are participating in a national effort that originally involved foreign language and literature faculty but is now spreading to other disciplines. These grass roots organizations started as a result of the formation of the national Academic Alliance. Funding for the national project includes a staff to offer support to those forming organizations and to publicize the concept, which is modeled after the work of local medical societies or law associations. Faculty involvement in the groups varies. One program in a city with five higher education institutions notes "disappointing support from university personnel." On the other hand, in one state over 10 alliances grew out of initial involvement by an arts and sciences dean at a large state university. Shared leadership is considered one of the most important factors for success.

Nearly a dozen projects in the region are part of the College Board's Educational EQuality Project Models Program, which promotes activities among college faculty and school personnel. Several projects focus on improving curriculum in the schools.

A number of states, including Florida, Georgia, Kentucky, Louisiana, Oklahoma, Tennessee, and Texas, have published competencies that all entering college freshmen should possess. These have been joint efforts of college and school personnel. Some are more specific than others. In Tennessee 1984 legislation mandated that the competencies defined by the College Board's EQ Project serve as the model for the skill and subject outcomes to be used in measuring educational progress in the state. The competencies are being used as criteria to determine placement in college-level work or in remedial courses. Oklahoma has just formed a committee composed of secondary educators, higher education representatives, and staff from the State Department of Education and Board of Regents to consider college-school projects, including work on high school curriculum.

Agreements permitting secondary vocational students to move easily from high school to a postsecondary institution are currently in place in many of the SREB states. For example, vocational students in the Lynchburg, Virginia, public schools may obtain equivalent college credit at Central Virginia Community College for specified skills achieved at the secondary level in the disciplines of auto mechanics, drafting, machine shop, and electricity. Instructors at both levels develop and teach from a list of competencies based on entry-level task requirements and agree on criteria for evaluating these levels of competency. Credit will be granted for competencies mastered at a level of 3.0 on a 4.0 scale, and no examination or fees will be required for receiving credit.

In another type of vocational agreement, Maryland's Howard Community College (HCC) and the Howard County School System, with funding from the State Board of Education, are developing a 2+2 articulation program in eight high technology areas. The program will allow students to progress through their studies more quickly by identifying prerequisite courses and educational tracks, which students can pursue to prepare for high technology

programs at HCC. This agreement will provide clearly stated competencies that are identified as necessary at various levels in the programs.

State-sponsored efforts aimed at particular disciplines include the North Carolina Mathematics and Science Education Network and the Florida Centers of Excellence in Science and Technology. These programs, aimed at in-service training for middle school teachers, concentrate on updating knowledge of teachers in mathematics and science. In addition, one of Tennessee's state-funded University Centers of Excellence focuses on improving science and mathematics education in the state.

Teachers of advanced placement courses often attend institutes offered by many higher education institutions in the region. Teachers work on content specialization, usually with arts and sciences faculties. For instance, the Southwestern Advanced Placement Consortium, supported by the College Board, began in 1980 with seven colleges; eleven institutions now offer courses to teachers. The goal of the project is to train 1,000 advanced placement teachers in Arkansas, New Mexico, Oklahoma, and Texas over the next five years.

North Carolina and Tennessee have state policies that call for faculty to spend time in the schools. The University of North Carolina at Chapel Hill also has a program which brings school teachers to the campus as full-time instructors for one year.

Institutional Initiatives

Following are examples of college-school efforts that address curriculum and teaching. These initiatives are in addition to regular teacher education programs at the institutions and exemplify institutional efforts.

Jefferson State Junior College (Alabama) takes part in the Jefferson County Consortium. High school curriculum and transition to college mathematics, English, and other subjects are the major focus. Faculty and teachers work together on curriculum and participate in workshops on subject matter issues.

University of South Alabama provides a faculty member to Mobile County schools to work in the schools at no charge for one day per month.

University of Arkansas at Little Rock has an ongoing ad hoc committee that taps the expertise of local teachers. The committee studies such issues as the core curriculum amd college admissions standards.

Chipola Junior College (Florida) and representatives from 15 area high schools meet to discuss articulation. Liaison teachers in mathematics, English, and science are designated from each of the high schools to confer with faculty.

Florida Atlantic University's Center of Excellence in Mathematics, Science, and Computer Technology is one of the state-funded programs to improve secondary school science and mathematics. Teacher knowledge is updated through courses; enrichment courses are also provided to students.

Middle Georgia College publishes a list of college faculty speakers (and topics) who are availllable to make academic presentations to area high schools.

Clayton Junior College (Georgia) faculty have consulted with the Atlanta public schools on seweral vocational programs, such as aviation mechanics, drafting, and data processing.

Berry College's (Georgia) Center for Economic Education works with teachers to help students in economic literacy. Curriculum planning, teaching techniques, and assistance with implementation are part of the program.

Atlanta Junior College (Georgia) has adopted a local high school. Faculty and teachers in Emglish work to improve the curriculum at both institutions. Faculty give llectures and serve as consultants for classrooms.

Ashland Community College (Kentucky) has developed a cooperative program with public schools. The initiative, funded through local revenue, focuses on faculty and sttaff development through writing curriculum for kindergarten through two years of college.

University of Kentucky has worked extensively with area county schools in curriculum pllanning. A Partnership for Excellence has been formed with Fayette County schools. A book published by the partnership details programs and topics offered by the university. For instance, it notes that physics and astronomy faculty are available for lectures at high schools and faculty members will work with teachers on curriculum issues.

University of Louisville (Kentucky) arts and sciences faculty and teachers designed a humanities course for county high schools. The courses are taught by teachers and faculty from the music, drama, art, religion, and philosophy disciplines.

Morgan State University (Maryland) supports an earth science center. Earth science faculty provide subject matter materials, speakers, and teaching activities for teachers in the Baltimore metropolitan area. They also provide retraining programs for teachers to meet the critical shortage of earth science teachers.

Community College of Baltimore (Maryland), with funding from the Ford Foundation, worked with five high schools to redesign arts and sciences curriculum for students preparing to complete four years of college.

Anne Arundel Community College (Maryland) faculty worked with the area school system to develop and restructure the English and mathematics curriculum in the schools.

University of Maryland, Eastern Shore arts and sciences faculty met with high school department chairs for a session on "Transition to College Articulation." A program is being instituted whereby faculty adopt a school and become guest lecturers once a month. A university-wide committee has met with State Department of Education personnel to discuss arrangements for joint work.

University of Southern Mississippi's Department of Mathematics regularly exchanges faculty with teachers in the area schools.

East Carolina University (North Carolina) has funded a clinical professor position to promote cooperative programs between the institution and surrounding rural school districts. A faculty resource book has been prepared to inform schools of available expertise. Exchanges between university faculty and school teachers have been arranged, and formal agreements have been made to begin teacher and student programs.

Duke University (North Carolina) sponsors the Duke/Durham Fellows seminars, started in 1984, which are modeled after the Yale/New Haven Teachers Institute. Seminars for arts and sciences faculty and teachers of advanced placement or advanced sections were held to encourage sharing of information about disciplines. Originally held in biology, chemistry, and English, history has been added to the program. The university provides stipends for professors; teachers are paid by the districts.

Wesleyan College (North Carolina) has established a program in which faculty and area teachers will work on a collaborative effort to improve teaching strategies in science for students in grades 4-12. The focus will be on students who have shown little academic success.

Wofford College (South Carolina), in a project funded partially by a grant from the Cosortium for the Advancement of Private Higher Education, has as its goals the improvement of teaching at high school and college levels and the development of faculty partnerships with high school teachers. Faculty and teachers from the same discipline will gather for retreats and get-togethers. It is hoped that faculty-teacher alliances will stimulate the formation of permanent working relationships.

University of Texas at Arlington has a history of faculty-teacher interaction in several disciplines. For instance, the Department of Biology has made a strong effort to provide advanced training to accommodate teachers. Master's level courses in biology (usually taught in the daytime) were rescheduled for evening to permit teachers to receive advanced training in biology as opposed to teachers taking only education courses.

Radford University (Virginia) has established partnerships with an area high school and an elementary school. Retreats with faculty and teachers are held; activities include resource sharing, with curriculum development and revision as the key. Teacher-professor exchanges are being explored.

University of Virginia has established the Center for Liberal Arts to establish a comprehensive and ongoing relationship among liberal arts faculty and teachers. The Center's chief goals are to clarify the conceptual bases and content of academic courses taught in the schools and improve the teaching of the subjects. The project began with defining goals of a liberal education followed by activities that included workshops and development of information and materials so that teachers will be less dependent on traditional texts. The Center foresees expansion into team teaching, exchange of teachers, and opportunities for teachers to pursue graduate study in liberal arts.

Virginia Commonwealth University sponsors projects in humanities and mathematics that are partially funded by the state. One program involving literature faculty, teachers, and subject coordinators from area districts includes an in-depth summer seminar and follow-up during the year. Activities include team teaching in the schools and study by school personnel of literary works.

More College-School Actions Needed

There are college-school efforts across the region; most focus on academically talented students. Those aimed at curriculum and teaching are often individual faculty efforts, rather than institutional initiatives. Programs for increasing motivation and preparation of those not ready to enter college are most often aimed at minority students. Though important, individual programs often meet the needs of only 15 or 20 students a year while large numbers of students with potential for college go unserved.

As states continue to increase standards for entrance into college, it is important to provide experiences for students to meet those standards. College-school actions noted in this summary illustrate a variety of approaches. These can serve as models for college and school linkages for quality student preparation and motivation.